

CALIFORNIA COASTAL COMMISSION

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F4a

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COASTAL DEVELOPMENT PERMIT APPLICATION – CONSENT ITEM

Application number**3-03-099, Las Olas Drive Revetment Maintenance**

ApplicantsSea Cliff Beach Association and the owners of the 22 involved properties (see exhibit A).

Project locationExisting rock rip-rap revetment fronting 25 single-family residences on the seaward side of Las Olas Drive immediately upcoast of Seacliff State Beach in the unincorporated Aptos-Seacliff area of south Santa Cruz County (see exhibits B and C).

Project descriptionMaintain approximately 1,500 linear feet of previously permitted revetment within its permitted profile and footprint, with the exception of that portion of the revetment spanning the 3 properties not participating (approximately 130 linear feet of the revetment in 2 discontinuous areas (see exhibit D) .

File documentsSanta Cruz County Certified Local Coastal Program (LCP); California Coastal Commission coastal development permit (CDP) file P-79-013 (Sea Cliff Beach Association, 1979); Santa Cruz County CDP files 88-1234 (Sea Cliff Beach Association, 1990) and 97-0837 (Sea Cliff Beach Association, 1999); California Coastal Commission Monterey Bay ReCAP.

Staff recommendation ...**Approval with Conditions**

Summary: The Applicants propose to maintain an existing permitted (by both the Coastal Commission and Santa Cruz County previously) revetment fronting the back beach homes along Las Olas Drive adjacent to Seacliff State Beach in south Santa Cruz County. The project is to maintain the revetment in its previously permitted configuration, and is not to allow for expansion of its footprint and profile. Staff has worked closely with the Applicants' representatives to develop appropriate parameters for such maintenance to ensure long-term stability while also protecting beach access and the beach-area viewshed. The recommended conditions of approval (that Staff and the Applicants' representatives have agreed upon) include provisions for: maintenance to take place on an as needed basis, subject to construction and restoration criteria; no further seaward encroachment in relation to the approved revetment profile; long-term monitoring; removal of non-native landscape cover and replacement with native plantings designed to cascade over the topmost portion of the revetment for screening; drainage control; and assumption of risk by the property owners. As so conditioned, Staff recommends approval.



California Coastal Commission

November 2003 Meeting in Los Angeles

Staff: D.Carl Approved by:

3-03-099 Las Olas Revetment Maintenance strfpt 11.7.2003.doc

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I. Staff Recommendation on CDP Application

The staff recommends that the Commission, after public hearing, **approve** a coastal development permit for the proposed development subject to the standard and special conditions below.

Motion. I move that the Commission approve Coastal Development Permit Number 3-03-099 pursuant to the staff recommendation.

Staff Recommendation of Approval. Staff recommends a **YES** vote. Passage of this motion will result in approval of the coastal development permit as conditioned and adoption of the following resolution and findings. The motion passes only by affirmative vote of a majority of the Commissioners present.

Resolution to Approve a Coastal Development Permit. The Commission hereby approves the coastal development permit on the grounds that the development as conditioned, will be in conformity with the policies of Chapter 3 of the Coastal Act. Approval of the coastal development permit complies with the California Environmental Quality Act because either: (1) feasible mitigation measures and/or alternatives have been incorporated to substantially lessen any significant adverse effects of the development on the environment; or (2) there are no feasible mitigation measures or alternatives that would substantially lessen any significant adverse effects of the development on the environment.



II. Conditions of Approval

A. Standard Conditions

1. **Notice of Receipt and Acknowledgment.** The permit is not valid and development shall not commence until a copy of the permit, signed by the Co-Permittees or their authorized agent, acknowledging receipt of the permit and acceptance of the terms and conditions, is returned to the Commission office.
2. **Interpretation.** Any questions of intent or interpretation of any condition will be resolved by the Executive Director or the Commission.
3. **Assignment.** The permit may be assigned to any qualified person, provided assignee files with the Commission an affidavit accepting all terms and conditions of the permit.
4. **Terms and Conditions Run with the Land.** These terms and conditions shall be perpetual, and it is the intention of the Commission and the Co-Permittees to bind all future owners and possessors of the subject property to the terms and conditions.

B. Special Conditions

1. **Approved Coastal Development Permit.** Coastal development permit (CDP) number 3-03-099 shall affect each parcel on which any portion of the revetment, vegetation, irrigation, or drainage elements approved pursuant to it are located ("Subject Property;" refer to exhibit D). The Subject Property does not include APNs 038-191-16, 038-191-30, and 038-191-31. The owners of the Subject Property are each co-permittees for this CDP ("Co-Permittees"), as is the Sea Cliff Beach Association. CDP 3-03-099 authorizes revetment repair and maintenance over the Subject Property subject to these standard and special conditions, and provides that such revetment repair and maintenance can occur over individual parcels or groups of parcels at different times, and as part of different repair and maintenance episodes ("Revetment Repair Episode"). Any Revetment Repair Episode initiates the Shoreline Plan (special condition 5) and As-Built Revetment Plan (special condition 6) requirements specific to each parcel on which an individual revetment repair episode has occurred, and initiates Beach Restoration (special condition 4) requirements. The term "Affected Co-Permittees" as used in these conditions means: (a) the Sea Cliff Beach Association; and (2) the owner or owners of property on which an individual revetment repair episode occurs.
2. **Approved Revetment Maintenance Plan.** The Approved Revetment Maintenance Plan (ARMP) is titled *2003 Maintenance Plan for Rip Rap Seawall* by Bowman & Williams dated received in the Coastal Commission's Central Coast District Office October 14, 2003. The ARMP shows the revetment in its approved (by Coastal Commission CDP number P-79-013 and Santa Cruz County CDP number 97-0837) footprint and profile, and does not show any enlargement beyond that approved. Expansion of the revetment beyond the approved footprint and profile is prohibited.



The Co-Permittees shall undertake development in accordance with the ARMP. Any proposed changes to the ARMP shall be reported to the Executive Director. No changes to the ARMP shall occur without a Commission amendment to this coastal development permit unless the Executive Director determines that no amendment is necessary.

- 3. Construction Plan.** PRIOR TO THE COMMENCEMENT OF CONSTRUCTION FOR ANY REVETMENT REPAIR EPISODE, the Affected Co-Permittees shall submit a Construction Plan to the Executive Director for review and approval. The Construction Plan shall be consistent with all requirements of the approved Revetment Maintenance Plan (see special condition 1), and shall identify the specific location of all construction areas, all staging areas, all storage areas, all construction access corridors (to the construction sites and staging areas), and all public pedestrian access corridors in site plan view. All such areas within which construction activities and/or staging are to take place shall be minimized to the maximum extent feasible in order to minimize construction encroachment on the beach and to have the least impact on public access. The Plan shall specify all construction methods to be used, including all methods to be used to keep the construction areas separated from beach recreational use areas (including using the space available inland of the revetment and/or residences for staging, storage, and construction activities to the maximum extent feasible) and shall include a final construction schedule. All erosion control/water quality best management practices to be implemented during construction and their location shall be noted. Silt fences, or equivalent apparatus, shall be installed at the perimeter of the construction site to prevent construction-related runoff, debris, materials, and/or sediment from leaving the construction area and/or entering into the Pacific Ocean.

A copy of the approved Construction Plan shall be kept at the construction job site at all times and all persons involved with the construction shall be briefed on its content and meaning prior to commencement of construction.

The Affected Co-Permittees shall notify planning staff of the Coastal Commission's Central Coast District Office at least 3 working days in advance of commencement of construction, and immediately upon completion of construction.

The Affected Co-Permittees shall undertake construction in accordance with the approved Construction Plan. Any proposed changes to the approved Construction Plan shall be reported to the Executive Director. No changes to the approved Construction Plan shall occur without a Commission amendment to this coastal development permit unless the Executive Director determines that no amendment is necessary.

- 4. Beach Restoration.** WITHIN THREE (3) DAYS OF COMPLETION OF CONSTRUCTION OF ANY REVETMENT REPAIR EPISODE, the Affected Co-Permittees shall restore all beach areas and all beach access points impacted by construction activities to their pre-construction condition. Any beach sand impacted shall be filtered as necessary to remove all construction debris from the beach. The Affected Co-Permittees shall notify planning staff of the Coastal Commission's Central Coast District Office upon completion of beach restoration activities to arrange for a site visit to



verify that all beach restoration activities are complete. If planning staff should identify additional reasonable measures necessary to restore the beach and beach access point, such measures shall be implemented immediately. The beach and beach access points shall be considered restored, and this condition satisfied for an individual Revetment Repair Episode, upon written indication of same from planning staff of the Coastal Commission's Central Coast District Office.

5. Shoreline Plan. WITHIN ONE (1) MONTH OF COMPLETION OF CONSTRUCTION OF ANY REVETMENT REPAIR EPISODE, the Affected Co-Permittees shall submit a Shoreline Plan to the Executive Director for review and approval. The Shoreline Plan shall apply to each parcel on which an individual Revetment Repair Episode has occurred. The Shoreline Plan shall have three related and overlapping elements: a revegetation plan, an irrigation plan, and a drainage plan. These are more specifically described as follows:

(a) Revegetation Plan. The purpose of the revegetation plan is to provide a vegetative cap along the top of the revetment, and not to fill in the voids between rocks. The revegetation plan shall provide for the removal of all non-native and/or invasive plant species (e.g., iceplant) currently present on the revetment and/or on the area between the revetment and the edge of the yard (the area between the top of the revetment and the residential improvements (i.e., lawns, fences, ornamental landscaping, decks) on each parcel) that is visible from the beach, and the planting of non-invasive native species along the full linear extent of this area above the revetment in a manner designed to provide for a dense cascading screen of vegetation to completely cover the area seaward of the edge of the yard and the upper half (roughly 10 vertical feet) of the revetment. Soils, soil composites (e.g., a mixture of sandy loam soil and cement), and support for same (such as filter fabric or equivalent), may be placed in and/or on top of the upper portion of the revetment to provide adequate planting pockets as necessary to ensure effective and successful screening. The revegetation plan shall clearly identify in site plan view the type, size, extent and location of all native plant materials to be used as chosen from the following native planting palette (substitutions of appropriate native bluff edge plants to complement this planting palette may be allowed upon written consent from the Executive Director):

- *Achillea millefolium* – yarrow
- *Artemisia californica* – California sagebrush
- *Baccharis pilularis* – prostrate greasewood
- *Bromus carinatus* var. *maritimus* – seaside brome
- *Ceanothus griseus* var. *horizontalis* – “Carmel creeper”
- *Ceanothus griseus* var. *horizontalis* – “Yankee Point”
- *Dudleya caespitosa* – live forever
- *Dudleya farinosa* – live forever
- *Elymus glaucus* – blue wild rye



- *Erigeron glaucus* – seaside daisy
- *Eriogonum latifolium* – buckwheat
- *Eriogonum parvifolium* – dune buckwheat
- *Eriophyllum staechadifolium* – lizard tail
- *Fragaria chiloensis* – beach strawberry
- *Grindelia stricta* – gumweed
- *Leymus pacificus* – beach wild rye
- *Mimulus aurantiacus* – sticky monkey flower
- *Myrica californica* – wax myrtie
- *Poa douglasii* – maritime bluegrass
- *Rhamnus californica* – coffeeberry

The revegetation plan shall include maintenance and monitoring parameters, and shall require that all plants be replaced as necessary to maintain the vegetative cap and associated dense cascading screen of vegetation to completely cover the upper half (roughly 10 vertical feet) of the revetment and the area between the revetment and the edge of the yards over the life of the revetment. To allow for initial growth, the Plan shall provide that the required screening be initially achieved within at least two years of initial Plan implementation, with an interim standard that at least the top 5 vertical feet of the revetment and the area between the revetment and the edge of the yards be screened within at least one year of initial Plan implementation.

The revegetation plan shall take into consideration the type of vegetative screening installed (or to be installed) at adjacent parcels pursuant to previous (or to be prepared) revegetation plans, and shall ensure visual compatibility with the plantings associated with them. All revegetation plans shall provide sufficient vegetation cover information regarding adjacent parcels to be able to evaluate expected visual compatibility.

The intention of this condition is not to require the homeowners to add to the height of the rip-rap, remove existing decks, patios or other “hardscape” improvements, but to apply practical and feasible measures to establish the vegetative cap. In certain cases, planter boxes may be necessary to facilitate planting of the vegetative cap, existing mature trees shall be permitted to remain, and in certain cases mature ornamental landscaping may be allowed to remain. In acknowledgement of the range of diverse conditions among the affected parcels, the Executive Director shall exercise discretion and apply reasonability and feasibility in reviewing each individual revegetation plan considering the site specific conditions of each parcel.

- (b) Irrigation Plan.** The irrigation plan shall provide for irrigation (e.g., drip emitters) as necessary to ensure that the revegetation plan is successful. All irrigation elements necessary for planting



success shall be clearly identified in site plan view. All other irrigation elements present in the yard areas shall be identified.

- (c) **Drainage Plan.** The drainage plan shall clearly identify all permanent measures to be taken to collect and direct yard area drainage. Such drainage may be used for landscape irrigation, including for the native planting revegetation, provided such irrigation use does not contribute to yard or revetment instability in any way. The plan shall provide that any new drainage pipes and/or drainage discharge shall not be visible from the beach.

The Shoreline Plan shall be developed with input from a landscape professional, and shall be submitted with evidence of the review and approval of a licensed engineering geologist and/or a licensed civil engineer with experience in coastal structures and processes. The Plan shall include maintenance and monitoring parameters designed to ensure revegetation, irrigation, and drainage success. The Plan shall include site plans and cross-sections that clearly identify all above-described elements in relation to the approved project and all property lines.

The Shoreline Plan shall be implemented immediately upon its approval by the Executive Director. WITHIN ONE (1) MONTH OF APPROVAL OF THE SHORELINE PLAN BY THE EXECUTIVE DIRECTOR, for each affected parcel, all non-native and/or invasive plant species (e.g., iceplant) on or in the revetment and the area above the revetment shall be removed, all native species identified in the Plan shall be planted, and all drainage and irrigation facilities shall be installed and shall be in working order.

The Affected Co-Permittees shall undertake development in accordance with the approved Shoreline Plan. Any proposed changes to the approved Shoreline Plan shall be reported to the Executive Director. No changes to the approved Shoreline Plan shall occur without a Commission amendment to this coastal development permit unless the Executive Director determines that no amendment is necessary.

The Affected Co-Permittees shall notify planning staff of the Coastal Commission's Central Coast District Office when all native species identified in the Plan have been planted and all drainage and irrigation facilities have been installed and are in working order consistent with the approved Plan. Initial implementation of the Shoreline Plan shall be considered complete, and this condition satisfied for any individual parcel, upon written indication of same from planning staff of the Coastal Commission's Central Coast District Office.

6. **As-Built Revetment Plans.** WITHIN TWO (2) MONTHS OF COMPLETION OF CONSTRUCTION OF ANY REVETMENT REPAIR EPISODE, the Affected Co-Permittees shall submit to the Executive Director for review and approval As-Built Plans of that portion of the overall revetment structure repaired pursuant to the Revetment Repair Episode that include multiple permanent surveyed benchmarks inland of the revetment for use in future monitoring efforts. The As-Built Plans shall at a minimum identify the extent of the revetment structure in site plan and cross-section views, and shall identify principal residential structures immediately inland of the revetment. All property and parcel lines, and all stairways (and any other structures) shall be



identified in site plan view. Photographs of the as-built structure, with the date and time of the photographs and the location of each photographic viewpoint noted on a site plan, shall be included. The benchmark elevation(s) shall be described in relation to National Geodetic Vertical Datum (NGVD). The As-Built Plans shall indicate vertical and horizontal reference distances from the surveyed benchmark(s) to survey points along the inland-most top and seaward-most toe of the revetment (located at those points in site plan view where the delineation of the revetment's edge changes direction) for use in future monitoring efforts; there shall be at least 3 such survey points along the inland top edge of the revetment (one at each parcel line and one in between), and at least 3 such survey points along the seaward toe of the revetment (one at each parcel line and one in between) for each parcel. The survey points shall be identified through permanent markers, benchmarks, survey position, written description, et cetera to allow measurements to be taken at the same location in order to compare information between years.

The As-Built Plans shall be submitted with certification by a licensed civil engineer with experience in coastal structures and process, acceptable to the Executive Director, verifying that the shoreline structure has been constructed in conformance with the Approved Revetment Maintenance Plan described by special condition 2 above.

7. Monitoring. The Co-Permittees shall ensure that the condition and performance of the as-built revetment is regularly monitored by a licensed civil engineer with experience in coastal structures and processes. Such monitoring evaluation shall at a minimum address whether any significant weathering or damage has occurred that would adversely impact its future performance, and identify any structural damage requiring repair to maintain the as-built revetment profile. At a minimum, the Co-Permittees shall submit to the Executive Director for review and approval a monitoring report at five year intervals by May 1st of each fifth year (with the first report due May 1, 2008, and subsequent reports due May 1, 2013, May 1, 2018, and so on) for as long as the revetment exists at this site. Each such report shall be prepared by a licensed civil engineer with experience in coastal structures and processes and shall cover the monitoring evaluation described in this condition above. Each report shall contain recommendations, if any, for necessary maintenance, repair, changes or modifications to the as-built revetment. All monitoring reports shall include a section on the revegetation, irrigation, and drainage components consistent with the parameters for monitoring, maintenance, and success established in the approved Shoreline Plan described in the Special Condition 5 above.

8. Shoreline Development Stipulations. By acceptance of this permit, each Co-Permittee acknowledges and agrees, on behalf of itself and all successors and assigns that:

(a) No Further Seaward Encroachment. Any future development, including, but not limited to, modifications to the revetment, shall be constructed inland of, and shall be prohibited seaward of, the seaward plane of the revetment. The seaward plane of the revetment is defined by the approved revetment footprint and profile as shown on: (1) the approved Revetment Maintenance Plan; and (2) where a Revetment Repair Episode has occurred, the approved As-Built Revetment Plans.



- (b) **Revetment Screening.** The upper half (roughly 10 vertical feet) of the revetment and the area between the revetment and the edge of the yards shall be completely screened from view (as seen from the beach) by a dense cascading screen of native vegetation for all areas where Revetment Repair Episodes have occurred. Shoreline Plans have been approved pursuant to coastal development permit 3-03-099 that specify the allowed native planting palette and the required vegetation maintenance parameters. All native plantings shall be maintained in good growing conditions, including the use of appropriate irrigation and drainage apparatus, and shall be replaced as necessary to maintain the screening vegetation consistent with the approved Shoreline Plans.
- (c) **Maintenance.** It is the Co-Permittees' responsibility to maintain the revetment and vegetative screening in a structurally sound manner and its approved state. A Revetment Maintenance Plan and As-Built Revetment Plans have been approved pursuant to coastal development permit 3-03-099 that define the profile and footprint of the approved revetment. For all areas where Revetment Repair Episodes have occurred, Shoreline Plans have been approved pursuant to coastal development permit 3-03-099 that provide for vegetation, irrigation, and drainage standards and criteria. Future maintenance as specified in special condition 11 is authorized pursuant to the parameters of coastal development permit 3-03-099, but this does not obviate the need to obtain permits from other agencies for any future maintenance and/or repair episodes. Special condition 11 (Future Maintenance) is incorporated here in its entirety by reference.
- (d) **Rock Retrieval.** Any rocks that move seaward of the as-built revetment shall be retrieved as soon as is feasible and either: (1) restacked within the approved as-built revetment footprint and profile; or (2) removed off the beach to a suitable disposal location. A Revetment Maintenance Plan and As-Built Revetment Plans have been approved pursuant to coastal development permit 3-03-099 that define the profile and footprint of the approved revetment. Any rock retrieval episode shall be pursuant to the maintenance parameters of coastal development permit 3-03-099. Any existing rock retrieved in this manner shall be recovered by excavation equipment positioned landward of the waterline (i.e., excavator equipment with mechanical extension arms).
- (e) **Debris Removal.** The Co-Permittees shall immediately remove all debris that may fall from the yard areas inland of the revetment onto the revetment or the beach below.
- (f) **Assumption of Risk, Waiver of Liability and Indemnity Agreement.** Each Co-Permittee acknowledges and agrees, on behalf of itself and all successors and assigns: (i) that the site is subject to hazards from episodic and long-term bluff retreat and coastal erosion; (ii) to assume the risks to the Co-Permittee and the property that is the subject of this permit of injury and damage from such hazards in connection with this permitted development; (iii) to unconditionally waive any claim of damage or liability against the Commission, its officers, agents, and employees for injury or damage from such hazards; (iv) to indemnify and hold harmless the Commission, its officers, agents, and employees with respect to the Commission's approval of the project against any and all liability, claims, demands, damages, costs (including



costs and fees incurred in defense of such claims), expenses, and amounts paid in settlement arising from any injury or damage due to such hazards; and (v) that any adverse effects to property caused by the permitted project shall be fully the responsibility of the landowner.

(g) Future Shoreline Planning. Each Co-Permittee agrees, on behalf of itself and all successors and assigns, to participate in future shoreline armoring planning efforts that involve the revetment approved pursuant to coastal development permit 3-03-099. Such planning efforts may involve consideration of a shoreline armoring management entity meant to cover the larger shoreline that includes the revetment here, and may involve consideration of potential modifications and/or programs designed to reduce public viewshed and beach access impacts due to shoreline armoring. Agreeing to participate in no way binds the Co-Permittees (and all successors and assigns) to any particular outcome of such planning efforts, and in no way limits the ability of the Co-Permittees or individual members of the Sea Cliff Beach Association (and all successors and assigns) to express his/her viewpoint during the course of such planning efforts.

9. Public Rights. The Coastal Commission's approval of this permit shall not constitute a waiver of any public rights which may exist on the property. The Co-Permittees shall not use this permit as evidence of a waiver of any public rights which may exist on the property.

10. Rodent Removal. If, at any time, evidence indicates that rodents are living in the voids in the revetment, then the Co-Permittees shall take reasonable action to eliminate such rodent colonization.

11. Future Maintenance. Coastal development permit 3-03-099 authorizes future maintenance as described in this special condition. Each Co-Permittee acknowledges and agrees, on behalf of itself and all successors and assigns that: (a) it is the Co-Permittees' responsibility to maintain the approved revetment, the vegetative screening, and all irrigation and drainage structures in a structurally sound manner and their approved state; (b) to retrieve rocks that move seaward of the revetment and either restack them (within the approved revetment footprint and profile) or dispose of them at a suitable inland disposal location as soon as is feasible after discovery of the rock movement; and (c) to remove all debris that may fall from the yard area inland of the revetment onto the revetment or the beach below. Any such development, or any other maintenance development associated with the revetment, the vegetative screening, and all irrigation and drainage structures, shall be subject to the following:

(a) Maintenance. "Maintenance," as it is understood in this condition, means development that would otherwise require a coastal development permit whose purpose is: (1) to reestablish or place rock within the permitted footprint and/or profile of the approved revetment structure; (2) to reestablish the permitted drainage, vegetation, and/or irrigation elements of the approved Shoreline Plans; and/or (3) to retrieve any rocks that move seaward of the approved revetment footprint and/or profile.

(b) Maintenance Parameters. Maintenance shall only be allowed subject to the approved construction plans required by special condition 3. All beach areas shall be restored subject to the beach restoration parameters of special condition 4 above. Any proposed modifications to the



approved construction plans and/or beach restoration requirements associated with any maintenance event shall be reported to planning staff of the Coastal Commission's Central Coast District Office with the maintenance notification (described below), and such changes shall require a coastal development permit amendment unless the Executive Director deems the proposed modifications to be minor in nature (i.e., the modifications would not result in additional coastal resource impacts).

- (c) **Other Agency Approvals.** The Co-Permittees acknowledge that these maintenance stipulations do not obviate the need to obtain permits from other agencies for any future maintenance and/or repair episodes.
- (d) **Maintenance Notification.** At least 45 days prior to commencing any maintenance event, the Affected Co-Permittees shall notify, in writing, planning staff of the Coastal Commission's Central Coast District Office. The notification shall include a detailed description of the maintenance event proposed, and shall include any plans, engineering and/or geology reports, proposed changes to the maintenance parameters, other agency authorizations, and other supporting documentation describing the maintenance event. The maintenance event shall not commence until the Affected Co-Permittees have been informed by planning staff of the Coastal Commission's Central Coast District Office that the maintenance event complies with this coastal development permit. If the Affected Co-Permittees have not received a response within 30 days of notification, the maintenance event shall be authorized as if planning staff affirmatively indicated that the event complies with this coastal development permit. The notification shall specify that the maintenance event is proposed pursuant to coastal development permit 3-03-099, and that the lack of a response to the notification within 30 days constitutes approval of it as specified in the permit.
- (e) **Maintenance Coordination.** Maintenance events shall, to the degree feasible, be coordinated with other maintenance events proposed in the immediate vicinity with the goal being to limit coastal resource impacts, including the length of time that construction occurs in and around the beach area and beach access points. As such, the Co-Permittees shall make reasonable efforts to coordinate the Co-Permittees' maintenance events with other events (such as those of the California Department of Parks and Recreation), including adjusting maintenance event scheduling as directed by planning staff of the Coastal Commission's Central Coast District Office.
- (f) **Non-compliance Proviso.** If the Co-Permittees are not in compliance with the conditions of this permit at the time that a maintenance event is proposed, then the maintenance event that might otherwise be allowed by the terms of this future maintenance condition shall not be allowed by this condition.
- (g) **Emergency.** Nothing in this condition shall serve to waive any Co-Permittee rights that may exist in cases of emergency pursuant to Coastal Act Section 30611, Coastal Act Section 30624, and Subchapter 4 of Chapter 5 of Title 14, Division 5.5, of the California Code of Regulations



(Permits for Approval of Emergency Work).

(h) Duration of Covered Maintenance. Future maintenance under this coastal development permit is allowed subject to the above terms for five (5) years from the date of approval (i.e., until November 7, 2008). Maintenance can be carried out beyond the 5-year period if the Executive Director extends the maintenance term in writing. The intent of the permit is to regularly allow for 5-year extensions of the maintenance term unless there are changed circumstances that may affect the consistency of the development with the policies of Chapter 3 of the Coastal Act and thus warrant a re-review of the permit.

12. Deed Restriction. PRIOR TO ISSUANCE OF THE COASTAL DEVELOPMENT PERMIT, the Co-Permittees shall submit to the Executive Director for review and approval documentation demonstrating that the Co-Permittees have executed and recorded against the parcel(s) governed by this permit a deed restriction, in a form and content acceptable to the Executive Director: (1) indicating that, pursuant to this permit, the California Coastal Commission has authorized development on the subject property, subject to terms and conditions that restrict the use and enjoyment of that property; and (2) imposing the special conditions of this permit as covenants, conditions and restrictions on the use and enjoyment of the property. The deed restriction shall include a legal description and site plan of the entire parcel or parcels governed by this permit. The deed restriction shall also indicate that, in the event of an extinguishment or termination of the deed restriction for any reason, the terms and conditions of this permit shall continue to restrict the use and enjoyment of the subject property so long as either this permit or the development it authorizes, or any part, modification, or amendment thereof, remains in existence on or with respect to the subject property.

III. Findings and Declarations

The Commission finds and declares as follows:

A. Project Location

The project is located along Las Olas Drive adjacent to State Parks' Seacliff State Beach unit in south Santa Cruz County (see exhibit B). Seacliff State Beach is located just downcoast of the City of Capitola (and the New Brighton State Beach unit) and it includes campsites, parking, beach, pier, interpretive center and associated public recreational amenities open year round. The Park is entered from Highway One through Seacliff Village through the blufftop above, with an access road winding down the bluffs onto an elevated, paved parking and day-use/campground area running along the back beach bluff area that is supported by a roughly 5 foot high bulkhead at its interface with the sandy beach. This "linear" State Park area along the base of the bluffs extends approximately one-mile (between Las Olas and Aptos Creek), with the Park's beach boundaries extending another mile downcoast past Aptos Creek.

Las Olas Drive is only accessed by traversing through the State Park, and is a private gated road running



along the base of the coastal bluff with 29 homes located along its seaward side. Las Olas dead-ends at Borregas Creek at its upcoast end. Although development such as this (essentially on the beach at the base of the coastal bluffs) is generally an anomaly along the California coast, the development at Las Olas is not atypical for this particular stretch of Santa Cruz County shoreline inasmuch as there exist similar exclusive subdivisions immediately upcoast (at Potbelly Beach) and downcoast (along Beach Drive and at Via Gaviota) of Seacliff State Beach. All of these developments are pre-Coastal Act and have maintained their precarious location in part at least due to shoreline armoring, such as the revetment fronting the seaward side of the homes at Las Olas. See exhibits B and C.

The revetment itself is approximately 1,500 feet long, and is stacked up against a retaining wall/bulkhead (and short fill bluff in some cases) that supports the pads for the Las Olas homes (see air photos in exhibit C). The revetment fronts all of the homes on Las Olas except for the four residences at its western (upcoast) end, and spans 25 (of the 29 Las Olas Drive) parcels. Because three property owners declined to take part in this application, approximately 130 linear feet of the revetment in two discontinuous areas is not a part of this project.¹ The Applicants estimate that the existing revetment is made up by 17,170 tons of large rock rip-rap.

The ¼ mile of beach fronting the revetment is part of a roughly 15 mile unbroken stretch of beach extending from New Brighton State Beach to the Pajaro River, and including six State Park units.² The Monterey Bay National Marine Sanctuary, the largest of twelve such federally protected sanctuaries nationwide, is directly offshore.

See exhibit A for a location map and exhibit B for oblique air photos of the project area.

B. Project Description

The revetment fronting the homes at Las Olas has existed for many years, and was permitted by both the Commission and the County in its current configuration.³ The Applicants⁴ propose to maintain the revetment prior to the upcoming winter by placing approximately 460 tons of rock in front of 13 of the affected residences, all within the existing permitted profile of the revetment. The Applicants also propose to periodically maintain the revetment (again within the existing permitted configuration) as necessary in the coming years. See project plans in exhibit D.

C. Coastal Development Permit Determination

¹ That is, the portion of the revetment fronting residences on APNs 038-191-16, 038-191-30, and 038-191-31 is not a part of this project (see exhibits A and D).

² New Brighton, Seacliff, Manresa, Sunset, Palm, and Zmudowski State Beaches.

³ Following multiple emergency permits, the Commission approved the revetment at this location in 1979 (CDP P-79-013). The County subsequently issued repair permits in 1990 and 1999 (88-1234 and 97-0837, respectively).

⁴ Note that the term "Applicants" is used in these findings to refer to all of the co-applicants.



1. Applicable Policies

Public Access, Recreation, and Views

Coastal Act Sections 30210 through 30214 and 30220 through 30224 specifically protect public access and recreation. This includes protecting public visual access as well. In particular:

30210. *In carrying out the requirement of Section 4 of Article X of the California Constitution, maximum access, which shall be conspicuously posted, and recreational opportunities shall be provided for all the people consistent with public safety needs and the need to protect public rights, rights of private property owners, and natural resource areas from overuse.*

30211. *Development shall not interfere with the public's right of access to the sea where acquired through use or legislative authorization, including, but not limited to, the use of dry sand and rocky coastal beaches to the first line of terrestrial vegetation.*

30213. *Lower cost visitor and recreational facilities shall be protected, encouraged, and, where feasible, provided. Developments providing public recreational opportunities are preferred. ...*

30221. *Oceanfront land suitable for recreational use shall be protected for recreational use and development unless present and foreseeable future demand for public or commercial recreational activities that could be accommodated on the property is already adequately provided for in the area.*

30223. *Upland areas necessary to support coastal recreational uses shall be reserved for such uses, where feasible.*

Coastal Act Section 30240(b) also protects parks and recreation areas such as the beach and surfing area seaward of the site. Section 30240(b) states:

30240(b). *Development in areas adjacent to environmentally sensitive habitat areas and parks and recreation areas shall be sited and designed to prevent impacts which would significantly degrade those areas, and shall be compatible with the continuance of those habitat and recreation areas.*

Coastal Act Section 30251 details specific public viewshed protections. Section 30251 states:

30251. *The scenic and visual qualities of coastal areas shall be considered and protected as a resource of public importance. Permitted development shall be sited and designed to protect views to and along the ocean and scenic coastal areas, to minimize the alteration of natural land forms, to be visually compatible with the character of surrounding areas, and, where feasible, to restore and enhance visual quality in visually degraded areas. New development in highly scenic areas such as those designated in the California Coastline Preservation and Recreation Plan prepared by the Department of Parks and Recreation and by local government shall be subordinate to the character of its setting.*



Finally, Section 30253 protects special recreational destination points such as the beach fronting the revetment and its relation to up and downcoast State Park units at New Brighton and Seacliff State Beaches. Section 30253 states, in part:

30253(5). *New development shall: where appropriate, protect special communities and neighborhoods which, because of their unique characteristics, are popular visitor destination points for recreational uses.*

Shoreline protective devices
Section 30235 of the Coastal Act:

30235. *Revetments, breakwaters, groins, harbor channels, seawalls, cliff retaining walls, and other such construction that alters natural shoreline processes shall be permitted when required to serve coastal-dependent uses or to protect existing structures or public beaches in danger from erosion, and when designed to eliminate or mitigate adverse impacts on local shoreline sand supply. Existing marine structures causing water stagnation contributing to pollution problems and fish kills should be phased out or upgraded where feasible.*

Long term stability

Section 30253 of the Coastal Act also addresses the need to ensure long-term structural integrity, minimize future risk, and avoid additional, more substantial protective measures in the future:

30253. *New development shall:*

- (1) Minimize risks to life and property in areas of high geologic, flood, and fire hazard.*
- (2) Assure stability and structural integrity, and neither create nor contribute significantly to erosion, geologic instability, or destruction of the site or surrounding area or in any way require the construction of protective devices that would substantially alter natural landforms along bluffs and cliffs. ...*

Policy Summary

In sum, although the maintenance and repair of existing permitted shoreline protective structures is meant to assure stability and structural integrity pursuant to the Act, Coastal Act policies protecting the adjacent recreational beach, the offshore recreational area, the beach area viewshed, and the overall shoreline visitor experience must be respected in that process.

2. Consistency Analysis

The beach area at the project site has been negatively impacted over time by the presence of the rock revetment fronting these homes, as well as the cumulative impact from this revetment when considered



in the context of the armoring fronting surrounding areas.⁵ These negative impacts include the unnatural back beach character defined by large piles of boulders, the loss of beach area given over to the boulders, the fixing of the back beach and its relation to overall loss of beach in the long term as the shoreline continues to erode and the sea level continues to rise over time. The beach recreational area here, including the larger beach recreational area stretching from New Brighton through Seacliff State Beaches), is one of the most popular for visitors in all of unincorporated Santa Cruz County. At the time of LCP certification, beach use at this larger beach area was estimated well in excess of one million persons per year.⁶ More recently, State Parks estimates visitor usage at Seacliff State Beach alone at between one and one-and-a-half million persons annually.⁷ The Monterey Bay National Marine Sanctuary is located directly offshore. It is within this context, and in light of the Coastal Act parameters established because of it, that individual projects must be understood and evaluated for their effect on the recreational beach experience.

In this case, the proposed project will add approximately 460 tons of rock to the back beach environment in order to reestablish the profile of the permitted revetment. The project will also provide for subsequent episodes of additional rock placement – some potentially larger, and some potentially smaller in scope than the initial 460 tons this winter.

Such a project raises Coastal Act issues because: recreational beach area will be impacted for the duration of each construction time frame; additional rock massing will be present in the public viewshed in the long-term; failure of the revetment could adversely affect recreational resources; and future erosion response could lead to more substantive hard armoring in the future.⁸ Fortunately, these issues can be readily rectified to ensure Coastal Act consistency as follows:

A. Construction Impacts

The project will: require the movement of large equipment, workers, and supplies through the State Park to gain access to the revetment site; include large equipment operations on the recreational beach area

⁵ Including armoring fronting State Park development at both upcoast New Brighton State Beach and downcoast Seacliff State Beach, as well as private armoring fronting Potbelly Beach homes and the further downcoast Beach Drive and Via Gaviota residential developments.

⁶ Background LCP reports completed in 1980 estimated annual visitor counts for this beach segment at 1,060,868 (1980 Public Access Working Paper for the County LCP). At that time, these annual use estimates were second only to the Twin Lakes State Beach unit in the Live Oak beach area of the County. Given the doubling of the County's population since 1970, and the increase in recreational use associated with that and population increases in surrounding areas, these historic figures likely undercount the current level of use at this location.

⁷ This figure accounts for visitors entering through Seacliff. However, as indicated, the beach is essentially continuous and there are multiple entry points, State Park and otherwise, and thus this figure underestimates overall beach usage.

⁸ The project also raises issues regarding the long term loss of beach due to armoring at this location (due to the fact that the revetment has fixed the back beach on an actively eroding shoreline, and that beach area will be lost as the shoreline continues to erode and the sea level continues to rise over time). However, the shoreline at this location was "fixed" prior to the coastal permitting requirements of Proposition 20 and the Coastal Act in the early 1970s. The revetment configuration has subsequently been permitted by the Commission (in 1979) and the County (in 1990 and 1999). As a result, while the issue of passive erosion is still relevant here, its relation to the proposed maintenance project before the Commission in this application is more one of background context. Although clearly relevant, and important to understand, fixing the back beach and its relation to the long-term loss of beach due to passive erosion is not clearly an impact of this project for which a sufficient nexus is present to address this impact.



fronting the site; result in the loss of recreational beach area to a construction zone (at the immediate project area); potentially encroach on Sanctuary waters (depending on tides); and generally intrude and negatively impact the aesthetics, ambiance, serenity, and safety of the recreation beach experience. These impacts can be contained through construction parameters that limit the area of construction, limit the times when work can take place (to avoid both weekends and peak summer use months when recreational use is highest), clearly fence off the minimum construction area necessary, keep equipment out of Sanctuary waters, require off-beach equipment and material storage during non-construction times, and clearly delineate and avoid to the maximum extent feasible beach use areas. The proposed plans include the majority of these requirements through plan notes (see exhibit D), and additional specific construction parameters can be specified through the submittal of additional details for individual repair episodes (see special condition 3). Even with these containment provisions, however, the public will bear the burden of the negative construction impacts associated with construction on this very popular beach. Because this project would allow for multiple such construction episodes, some potentially larger than the episode for this winter, these impacts would be correspondingly multiplied.

Although the beach area can and must be restored to their original configuration immediately following construction to limit these impacts (see special condition 4), the other temporary construction impacts (the loss of beach space, and the degradation of beach recreational experience and viewshed), require some form of compensatory mitigation. Unfortunately, there doesn't currently exist a formal program in this area for addressing such impacts in a systematic way (e.g., an in-lieu fee to be applied to beach access enhancements in the area). That said, there are other project impacts for which direct mitigation is required (see below). When the impacts are considered together, an appropriate roughly proportional mitigation can be applied (see requirements below).

B. Recreational Beach and Facility Impacts

Revetments are notoriously unstable, particularly when they are placed directly atop sand (as is the case here), and not keyed into more stable bedrock. They are prone to slumping, and individual rock movement. This can be exacerbated by storm events. As evidenced by the 460 tons of additional rock that is going to be imported to recreate the permitted profile (initially), the rock that is placed oftentimes moves away from the revetment. Sometimes this movement is obvious, as in the case when a rock boulder is separated from the remainder of the engineered stack and is resting atop the beach sand. Other times this movement is less obvious, as when boulders migrate under sand into beach recreational areas and even offshore. Although there are long-term structural stability issues associated with this (see also stability findings below), rocks that migrate can negatively impact beach recreational use and facilities. This impact can be due to displacement (where rocks occupy beach space), or increased danger to recreation (such as a rock submerged just below the surface or in the recreational surf zone), or increased danger to recreational structures (such as Seacliff State Beach facilities) when such rocks are thrown landward in storm events, or combinations of each. Individual rocks that migrate can sometimes be retrieved, and other times cannot be located. In both cases, the rock leads to negative impacts depending on its location relative to beach uses areas, the length of time it is located in areas that detract from recreational use, and its potential for causing damage in a storm event (particularly given that such storms typically scour away beach sand and expose strewn rocks otherwise hidden).



Unfortunately, this impact, though clear analytically (and obvious due to the fact that rock is continually brought in to augment revetments, including this one), is difficult to quantify. It is unknown, for example, where the 460 tons of rock being replaced at this time are currently located. These rocks are likely in the beach area, under the sand or in the surf zone, but this is not known for certain. Nor is it easily determined. It can be assumed, however, that some portion of these rocks will lead to the types of negative impacts described above as they are exposed and/or moved by storms. Because this project would allow for multiple such augmentation episodes, some potentially larger than the episode for this winter, these impacts would be correspondingly multiplied.

Unfortunately, as with construction impacts, there doesn't currently exist a formal program for measuring and addressing these impacts in a systematic way.⁹ That said, there are other project impacts for which direct mitigation is required (see below). When the impacts are considered together, an appropriate roughly proportional mitigation can be applied (see requirements below).¹⁰

C. Additional Rock Massing in the Public Viewshed

In addition to the above impacts, the proposed project would also adversely affect the overall public viewshed and aesthetic over the long term by introducing 460 additional tons of large rock into the back beach area. Because this project would allow for multiple such augmentation episodes, some potentially larger than the episode for this winter, these impacts would be correspondingly multiplied. The long-term result would be an ever more imposing and unnatural (compared to the natural bluff landforms in this area) rock boulder facade in the back beach area. Absent some form of effective camouflaging, this would be a significant long-term burden borne by the public, with the benefit from the rock all to the private landowner.

Originally, the revetment was to be camouflaged with sand and native dune vegetation in 1979.¹¹ It is not clear from the file whether this occurred initially or not. In any case, it is clear that the existing revetment is not covered with sand, and the vegetation that caps it includes non-natives (such as iceplant).

Although the existing landscape cover provides some visual relief, it also contributes to the incremental alteration of the natural bluff landform and vegetation. Furthermore, iceplant is an invasive landscape species with a shallow root system that does not help to solidify soils, but rather can lead to instability

⁹ There has been some discussion of requiring CDP permittees to track individual boulders placed in some way to both ease retrieval, and to quantify (for mitigation purposes) permittees' contribution to large rock in recreational beach environments. These discussions have not yet resulted in any programmatic tools for addressing this issue.

¹⁰ Note that these mitigation requirements do not address the issue of the potential for the rocks to adversely impact public beach facilities (such as those present adjacent at Seacliff State Beach). This impact is both difficult to measure, and difficult to mitigate. In the case where such a facility were damaged in a storm, it can be difficult to know for sure whether it was damaged by rock or some other debris, or by the storm itself. Even if such damage were conclusively shown to be from a large rock, it would be difficult to determine with certainty what percentage of the damage was due to the rock, and where the rock came from (e.g., from this revetment or other rock historically placed nearby by State Parks). This type of impact needs to be addressed through development of a better programmatic mitigation framework for addressing this potential impact; a framework that appears to be outside the scope of this project at this time, and thus it is not addressed here.

¹¹ Per Coastal Commission CDP P-79-013.



when the weight of the plant matter above grade becomes too heavy (for example, during storm events) and causes the plant material to topple over (bringing with it soils). Long-rooted non-invasive native plant species should be used for this purpose,¹² and are what was originally required. In a bluff setting, these species can help to stabilize bluff soils, minimize irrigation of the bluff (again helping to stabilize the bluff), and can help to avoid failure and sloughing in some cases. These native species also help to create a more natural back beach vegetation aesthetic because the species are natural to the bluffs in this area and can be coordinated between individual property owners along the revetment (and thus leading to a more coherent visual pattern as seen from the beach below).

Therefore, to mitigate for the negative construction viewshed impacts (see above), to mitigate for the beach viewshed degradation due to any rock migration (before it is retrieved), and to mitigate for the long-term impact of additional rock massing in the viewshed, and to enhance the natural landform (for scenic value) and stability (see also “Long-Term Stability” section that follows), the Applicants must replant with appropriate native species, and achieve and maintain vegetation performance standards for a long-term cascading planting screen to cover the upper third (roughly 10 vertical feet) of the revetment for the life of the project (see special conditions 5 and 8). Given the height of the revetment, such screening should provide effective revetment camouflaging during most times of the year. Extending the screening further down slope does not appear feasible at this time due to the lack of available soil areas for plantings, and the increased potential for the loss of materials in the lower revetment area during winter storm events.

D. No Seaward Encroachment

Pursuant to Coastal Act Section 30253, development is to be designed, sited, and built to allow the natural shoreline processes to occur without creating a need for additional more substantive armoring. Coastal development permittees for new shorefront development thus are essentially making a commitment to the public (through the approved action of the Commission, and its local government counterparts) that, in return for building their project, the public will not lose public beach access, sand supply, visual resources, and natural landforms, and that the public will not be held responsible for any future stability problems. This commitment was made when the CDP was granted in 1979. The Applicants are now proposing to refurbish the revetment. Coastal Act Section 30253 requires that the current project, like the original project before it, assure structural stability without the need for additional armoring.

The proposed revetment refurbishment (to re-stack at a 1.5:1 slope) is consistent with the general practice for such revetments along Santa Cruz County’s shoreline, and consistent with generally accepted engineering principals for revetments.¹³ The existing armoring structure here has basically

¹² Non-native invasive plants invade native habitat areas and vastly alter the ecological landscape by out-competing and excluding native plants and animals; altering nutrient cycles, hydrology, and wildfire frequencies, and hybridizing. Rare species are particularly vulnerable to the changes brought about by non-native invaders. The most effective and efficient way to deal with weedy species is to prevent invasions. Preventing invasion is of greater conservation benefit in the long run than the far more costly and difficult efforts to control a widespread pest species.

¹³ The Applicants’ consulting civil engineer has also certified the plans.



fixed the back beach at the revetment location and halted shoreline retreat. Thus, it is not anticipated that additional rock seaward of the revetment profile will be necessary in the future due to the fact that the residences are being protected consistent with the general standards for armoring along this stretch of coast. Such potential seaward encroachment would give rise to another level of potential Coastal Act inconsistency inasmuch as it would occupy recreational sandy beach and intensify the amount of rock within the beach area public viewshed; in other words, all of the above described impacts in this case would be present as would the additional impact of the loss of existing sandy beach area. Further, to allow a project that would itself require additional armoring seaward of that existing revetment would not be consistent with Section 30253 because stability and structural integrity must be assured without reliance on future armoring.

Therefore, to mitigate against the possibility that additional armoring is installed seaward of the revetment, to mitigate for the impacts on beach recreational use due to construction (both loss of useable beach area and degradation of beach going experience), to mitigate for the impacts on beach recreational use due to rock migration (both loss of beach space and degradation of beach recreational area), development (including maintenance per this permit and any other future development) shall be prohibited seaward of the existing permitted footprint and profile of the permitted revetment (see special conditions 2 and 8). This applies to the wedge of rock in a 1.5:1 slope making up the revetment profile (in cross-section) as well as the seaward toe itself (in site plan). In other words, at no time shall additional rock and/or other development be allowed seaward of any point on the revetment profile.¹⁴

E. Monitoring, Maintenance, and Long-Term Stability

If the revetment was damaged in the future (e.g. as a result of wave action, storms, landsliding, etc.) it could threaten the stability of the inland residential sites, which could lead to need for more bluff alteration and/or additional or more substantive armoring. In addition, any boulders that separate themselves from the main revetment would adversely affect beach recreational use, and potentially beach recreational facilities (as described above). Loose boulders could also act to damage either the revetment or the inland homes if they are moved around during storm events. In addition, if drainage isn't adequately contained and controlled, it can lead to soil instability inland of the revetment and potential undermining/collapse of the revetment itself.

Therefore, to mitigate (i.e., avoid) these potential impacts to coastal access and long-term stability (residential and otherwise) to the degree feasible, the condition of the revetment in its approved state must be maintained for the life of the revetment, and mitigation measures are required to ensure that this is the case. Toward this end, any boulders that migrate seaward of the revetment must be promptly retrieved and restacked or removed off-site to limit the extent of their negative impacts (as discussed

¹⁴ This point is made so as to avoid any future confusion should it be argued that the toe of the revetment in site plan view by itself defines the line past which rock cannot be placed. Using this incorrect interpretation, an applicant could argue that additional armoring and/or other development could be placed on top of the approved revetment slope so long as it didn't go seaward of the toe. Such placement would lead to even more substantive armoring and/or other development in the back beach placed at a steep and unstable slope (i.e., in excess of the 1.5:1 slope approved). Such incorrect interpretation could also lead to a scenario where a vertical seawall is proposed at the toe, with the area inland of the wall (i.e., the existing revetment area) backfilled for private use. Neither are allowed here.



above). Drainage must be controlled to ensure overall stability. Further, in order to ensure that the Applicants and the Commission know when repairs or maintenance are required, the Applicants must monitor the condition of the revetment over the long term. The monitoring will ensure that the Applicants and the Commission are aware of any damage to the revetment and can determine whether repairs or other actions are necessary to maintain the revetment in its approved state (and avoid emergency situations). Finally, to ensure clarity for permit implementation and monitoring, and to avoid undue interpretation, future monitoring and maintenance activities must be understood in relation to a clear as-built revetment footprint and profile.

Therefore, special conditions are attached to this approval for the submittal of as-built plans (to define the footprint and profile of the permitted structure) with surveyed reference points to assist in evaluation of future proposals at this site (see special condition 6), and to provide for drainage, irrigation, and vegetation (see also previous finding) parameters for the area at the top of the revetment (see special condition 5). For monitoring, the Applicants are responsible for ensuring the revetment is regularly monitored by a by a licensed civil engineer with experience in coastal structures and processes, and are required to submit a monitoring report on five year intervals that evaluates the condition and performance of the revetment, and to submit the report with recommendations, if any, for necessary maintenance, repair, changes or modifications to the project (see special condition 7). The Applicants are responsible for promptly retrieving and restacking (or removing off-site) any boulders that migrate seaward of the existing revetment (see special condition 8). All requirements must be recorded as property restrictions to ensure long-term compliance, and to ensure that any future landowners are clearly notified of these commitments (see special condition 12). Future maintenance events are allowed consistent with all other requirements of this approval for a five-year period, and this 5 year period can be extended as long as there aren't any changed circumstances that may affect the consistency of the development with the policies of Chapter 3 of the Coastal Act and thus warrant a re-review of the permit (see special condition 11).

F. Assumption of Risk

The experience of the Commission in evaluating the consistency of proposed developments with Coastal Act policies regarding development in areas subject to problems associated with geologic instability, flood, wave, or erosion hazard, has been that development has continued to occur despite periodic episodes of heavy storm damage, landslides, or other such occurrences. Oceanfront development is susceptible to bluff retreat and erosion damage due to storm waves and storm surge conditions. Past occurrences statewide have resulted in public costs (through low- and no-interest loans, grants, subsidies, direct assistance, etc.) in the millions of dollars. As a means of allowing continued development in areas subject to these hazards while avoiding to the extent feasible placing the economic burden on the people of the state for damages, the Commission has regularly required that Applicants acknowledge a site's coastal hazard risks and agree to waive any claims of liability on the part of the Commission for allowing the development to proceed. Such was the case here when the revetment was approved by the Commission in 1979.

There are inherent risks associated with development on and around revetments and eroding bluffs in a



dynamic coastal bluff environment; this applies to the revetment maintenance proposed as well as to the development landward of the revetment. The Las Olas Drive residential development, including the revetment, is likely to be affected by shoreline erosion in the future. Although the Commission has sought to minimize the risks associated with the development proposed in this application, the risks cannot be eliminated entirely. Given that the Applicants have chosen to pursue and maintain development at this land-sea interface despite these risks, the Applicants must assume these risks. Accordingly, this approval is conditioned for each property owner to assume all risks for developing at this location and to indemnify the Commission against any claims for damages (see special condition 8).

G. Other Beach Area Development and Public Rights

The property ownership pattern at this location is such that a portion of the sandy beach area seaward of the revetment, as well as that under the revetment, is held in fee-title by the property owners (see exhibit D). The State Lands Commission has not made a formal determination for this stretch of coast, but has indicated that it doesn't appear that state lands are involved with this revetment.¹⁵

There have been issues at nearby beach areas with similar private fee-title characteristics where inland property owners have posted signs on the beach that restrict public use of it (e.g., most recently at downcoast Beach Drive near Hidden Beach), and have attempted to enforce them (e.g., with private security). The Commission considers the placement of such signs and the implementation of any such use restrictions to be development requiring a coastal development permit from the Commission. Although each case must be evaluated on its own merits and set of facts, it is noted that the Commission is not generally supportive of such signs and use restrictions because, at a minimum: (1) they negatively impact the beach viewshed; (2) they are a physical impediment to beach recreational use; and (3) they interfere with beach recreational use (to greater and lesser degrees depending on the sign text and the nature of the enforcement of it). In this case, the Applicants indicate that there are no such signs nor use restrictions (nor associated enforcement) seaward of the Las Olas Drive homes, and none are proposed in this application. This approval includes a prohibition on development seaward of the revetment, and thus the existing status quo (without beach area signs, fences, etc) will be maintained as such development will be prohibited in the future (see special conditions 2 and 8). As a result, there is no issue in this regard with respect to this application.

In any case, there has been a long and steady history of public use of the beach area here. So as not to prejudice any future evaluations on this topic, and so as to avoid a situation where this revetment maintenance approval were described as resolving any ownership/public use issues, a condition is attached stating that the Commission's approval of this project does not constitute a waiver of any public rights which may exist on the property, and that the Applicants cannot use this approval as evidence of a waiver of same (see special condition 9).¹⁶

¹⁵ As usual, State Lands has not waived any right, title, or interest of the State with regard to this property, and reserves the right to conclude differently should further facts and evaluation dictate.

¹⁶ Note that this requirement was also a condition of CDP P-79-013.



H. Rodents

Revetments are known to harbor rodents; particularly revetments fronting popular beach areas (due to visitors' food and garbage). In some areas of Santa Cruz County, such rodent infestations in revetments are quite common (e.g., in the Live Oak beach area). Such rodents negatively impact the beach recreational experience, and can lead to serious public health problems. In this case, the Commission is unaware of any evidence indicating that there is any rodent infestation within the subject revetment. The Applicants have indicated that if there were to be such a problem, they would promptly respond to eradicate such an infestation. This approval is conditioned to require same so as to protect beach recreational users and the Applicants in this regard (see special condition 10).

I. Note: Permit Structure Because of Multiple Properties and Multiple Applicants

As detailed above, the revetment spans multiple properties and property ownerships. Maintenance on it will not necessarily involve all of the revetment in any one episode. For example, the current maintenance event for this winter would involve about one-half of the properties. The application was made by the Sea Cliff Beach Association (i.e., the homeowners association for Las Olas Drive residences) and 22 of the 25 property owners on which the revetment is located. As a result, the Sea Cliff Beach Association and each of the applicant property owners is a co-applicant (and a co-permittee). The Sea Cliff Beach Association is expected to be the co-permittees' primary go-between, facilitator and manager for CDP implementation, although this isn't required by this approval. See special condition 1.

Although all conditions are applicable to the Sea Cliff Beach Association and each involved property owner, and they agree to abide by them as co-permittees, the requirement for the shoreline plans (i.e., revegetation, drainage, and irrigation) and the as-built plans are only initiated for an individual property when revetment work takes place on that property (see special condition 1). In any case, all of the conditions apply to all of the applicants, and are to be recorded as a deed restriction on each individual property on which the revetment is located (see special condition 12).¹⁷

J. Coastal Act Consistency Conclusion

Although the project in some ways provides for fairly straight-forward revetment repair, it includes impacts to beach recreational resources that must be properly mitigated, and it must not itself require additional more substantive armoring for the Commission to find the project consistent with the Coastal Act policies cited herein. Thus special conditions are included to define construction parameters, to restore the beach area after construction, to ensure the project is properly monitored and maintained over time, to provide for a native plant vegetated screen across the top of the revetment, to ensure that there will be no current or future seaward encroachment of rock or other development, and to record these restrictions on the property to ensure that any future landowners are made aware of the requirements applicable to the revetment (see special conditions).

¹⁷ Other than the 3 properties (involving approximately 130 feet of the revetment) not a part of the project (APNs 038-191-16, 038-191-30, and 038-191-31) because these property owners declined to participate in this application.



Finally, the mitigations imposed here will alleviate, but cannot completely eliminate, the long-term impacts to the public both as a result of this individual project and the overall cumulative effect of it together with all the other armoring along this stretch of coast. Some of this long term impact was “inherited” by the people of the state due to the fact that much of this stretch of coast was already armored to a certain degree, including the Las Olas Drive development, when the coastal permitting requirements of Proposition 20 and the Coastal Act were instituted in the early 1970s. With the sea level continuing to rise, and the shoreline continuing to erode, it is expected that the beach fronting these properties, like all California beaches on which armoring is located and on which the back-beach has thus been effectively “fixed” in location, will eventually disappear over time. The State has not to date completely come to grips with this phenomena, particularly as it relates to existing permitted and pre-Prop. 20/Coastal Act armoring such as this.

At a minimum, additional regional planning (e.g., a specific plan for addressing armoring needs and impacts along this stretch of coastline), regional planning mechanisms (e.g., a shoreline armoring management entity meant to cover the larger shoreline that includes the revetment here), and/or implementation tools (e.g., a systematic approach for identifying and addressing specific armoring impacts, like boulders migrating from revetments) may be necessary. The Applicants have agreed and are required to participate in future planning efforts that involve the revetment here (see special condition 8); participation in no way binds the property owners to a certain outcome, but ensures that affected property owners are part of any such future discourse. At this time, the Commission is unaware of any such efforts for this area of south Santa Cruz County, although efforts are underway in the Opal Cliffs area of Santa Cruz County further upcoast,¹⁸ at least partially due to the Commission’s findings in the 1995 Monterey Bay Regional Cumulative Assessment (or ReCAP) project.¹⁹

Past such localized planning efforts, there is also a movement statewide to more comprehensively address shoreline erosion through the concept of planned (or sometimes called “managed”) retreat. Planned retreat acknowledges that shoreline armoring designed to protect development along an eroding shoreline will ultimately lead to the loss of California beaches and offshore use (like surfing) areas. While the benefit of such armoring accrues to individual property owners (for whom the armoring maintains their shoreline location), the burden falls on the general public, both visitors and residents, because California’s beaches are slowly being reduced as a result.²⁰ The concept of planned retreat

¹⁸ Property owners and the County have begun preliminary efforts toward developing these types of regional planning tools to address the issue of shoreline armoring with a case study focusing on the Opal Cliffs portion of the Live Oak beach area just upcoast of the City of Capitola. As the Commission currently understands it, the Opal Cliffs project would focus on the removal of the rubble and rock revetments that block much of the beach access in this area, and would develop measures to sculpt and camouflage any armoring that is allowable under the Coastal Act in such a way as to mimic the natural bluff topography and vegetation. Options for building in pedestrian platforms in permitted armoring that allow for lateral access at even higher tides would also be evaluated

¹⁹ In the 1995 Monterey Bay ReCAP project, the Commission recommended such a regional shoreline planning approach (i.e., by defined geographic units) for the Monterey Bay area where it was estimated that approximately 25 acres of sandy beach had been covered with shoreline armoring in the study region by 1993, most of that in Santa Cruz County.

²⁰ The burden goes beyond just a lack of beach space available to use and a lack of conducive ocean conditions for recreation inasmuch as the beaches themselves are a huge draw for both local communities and the State as a whole, acting as a driver of both local and state economies. The beaches have also always been a large part of coastal California’s cultural identity and social fabric; the effect of their slow (but steady) loss over time in this regard is more difficult to measure.



advocates that instead of allowing continued armoring, the shoreline should be allowed to retreat naturally. In this way, as the shoreline naturally erodes and sea level rises, new beaches would form (as bluffs naturally crumble and become beaches over time).²¹ The primary difficulty with a planned retreat strategy is that much of the armored shoreline is currently fronting development, residential and otherwise, that would eventually need to be retired (e.g., purchased, armoring (if any) and development on it removed) if the shoreline were to be allowed to retreat naturally. The planned retreat dialogue is currently in its infancy statewide, and it is unclear to what (future) extent this concept will be applied to development applications, such as this, in California. It is noted here only to provide relevant background context for the current application.

3. California Environmental Quality Act (CEQA)

Section 13096 of the California Code of Regulations requires that a specific finding be made in conjunction with coastal development permit applications showing the application to be consistent with any applicable requirements of CEQA. Section 21080.5(d)(2)(A) of CEQA prohibits a proposed development from being approved if there are feasible alternatives or feasible mitigation measures available which would substantially lessen any significant adverse effect which the activity may have on the environment.

The Coastal Commission's review and analysis of land use proposals has been certified by the Secretary of Resources as being the functional equivalent of environmental review under CEQA. This staff report has discussed the relevant coastal resource issues with the proposal, and has recommended appropriate suggested modifications to avoid and/or lessen any potential for adverse impacts to said resources. All public comments received to date have been addressed in the findings above. All above Coastal Act findings are incorporated herein in their entirety by reference.

As such, there are no additional feasible alternatives nor feasible mitigation measures available which would substantially lessen any significant adverse environmental effects which approval of the proposed project, as modified, would have on the environment within the meaning of CEQA. Thus, if so modified, the proposed project will not result in any significant environmental effects for which feasible mitigation measures have not been employed consistent with CEQA Section 21080.5(d)(2)(A).

²¹ Beach formation would partly be assisted by the sand generating material in the "freed" bluffs themselves, but more importantly there would be space for the natural equilibrium between the shoreline and the ocean to establish itself and beaches formed.

